

# इंटरनेट

# मानक

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IS 8664 (1977): Edible Coconut Flour (Expeller Pressed)  
[FAD 16: Foodgrains, Starches and Ready to Eat Foods]



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**IS : 8664 - 1977**

***Indian Standard***

**SPECIFICATION FOR EDIBLE COCONUT  
FLOUR ( EXPELLER PRESSED )**

UDC 664 761 · 634·616 : 66·068



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**INDIAN STANDARDS INSTITUTION**  
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## Indian Standard

### SPECIFICATION FOR EDIBLE COCONUT FLOUR ( EXPELLER PRESSED )

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**IS : 8664 - 1977**

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AMENDMENT NO. 1    APRIL 1979  
TO  
IS:8664-1977 SPECIFICATION FOR EDIBLE  
COCONUT FLOUR (EXPELLER PRESSED)

Corrigendum

[Page 5, Table 1, col 3, against Sl No.(viii)] -  
Substitute '60' for '6.0'.

(AFDC 37)

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Reprography Unit, ISI, New Delhi

**AMENDMENT NO. 2 JULY 1999  
TO  
IS 8664 : 1977 SPECIFICATION FOR EDIBLE  
COCONUT FLOUR ( EXPELLER PRESSED )**

*{ Page 5, Table 1, Sl No. (viii), col 3 ( See also Amendment No 1 ) } —  
Substitute '30' for '60'*

( FAD 15 )

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Reprography Unit, BIS, New Delhi, India



**Indian Standard**  
**SPECIFICATION FOR EDIBLE COCONUT**  
**FLOUR ( EXPELLER PRESSED )**

**0. FOREWORD**

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 28 December 1977, after the draft finalized by the Nutrition Sectional Committee had been approved by the Agricultural and Food Products Division Council

**0.2** There is considerable scope for production of an edible flour from coconut kernels or copra for use as a protein supplement in human dietaries. The flour is of good quality and is obtained as a powder which can be used both in blended and processed foods, even though the fibre content is recognized to be fairly high

**0.3** India produces large quantities of coconuts from which an edible flour of good nutritive value can be produced by an expeller process. It is intended to include, at a later stage, the quality of protein, when sufficient data becomes available.

**0.4** In the preparation of this standard, due consideration has been given to the provisions of the Solvent Extracted Oil, De-oiled Meal and Edible Flour ( Control ) Order, 1967 ; the Prevention of Food Adulteration Act, 1954 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under these, where applicable.

**0.5** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2 - 1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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**1. SCOPE**

**1.1** This standard prescribes the requirements and the methods of sampling and test for edible coconut flour obtained from fresh coconut kernel or dried copra by the expeller ( screw-press ) process

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\*Rules for rounding off numerical values ( revised )

**IS : 8664 - 1977**

## **2. REQUIREMENTS**

**2.1 Raw Material** — The material shall be made either from fresh coconut kernels or from dried coconut copra of good quality free from moulds.

**2.2** The expelling ( screw-pressing ) operation shall be conducted in the usual way perhaps in two passes but under mild conditions designed to achieve the maximum protein quality at the specified oil content.

**2.3** The flour, obtained by grinding the cake, shall be of light brown colour, uniform in composition and free from insect, rodent or fungal infestation, objectionable odour and rancid taste. It shall not contain added flavouring or colouring agents or any other extraneous matter. It shall be free from harmful foreign oilcakes, such as castor and *MAHUA* when tested in accordance with the method prescribed in **11** and **12** of IS : 7874 (Part I) - 1975\*, respectively. It shall also be free from *NEEM* cake and other foreign materials such as jaggery and molasses

**2.4 Particle Size** — Unless otherwise specified by the purchaser, the material shall be such that it passes completely through a 250-micron IS Sieve ( see IS : 460 - 1962† ).

**2.5** The material shall be manufactured, packed and stored in premises with equipment maintained under hygienic conditions necessary for food processing units ( see IS : 2491 - 1972‡ ).

**2.6** The material shall also comply with the requirements given in Table 1.

**2.7 Microbiological Limits** — The edible coconut flour ( expeller pressed ) shall be tested periodically to comply with the requirements given in Table 2

## **3. PACKING AND MARKING**

**3.1 Packing** — The material shall be packed in dry and clean containers made of polyethylene or polyethylene lined jute in the form of a bag, the mouth of which shall be either machined or hand stitched with at least 14 stitches in each row.

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\*Methods of test for animal feeds and feeding stuffs . Part I General methods.

†Specification for test sieves ( revised ).

‡Code for hygienic conditions for food processing units ( first revision ).

**TABLE 1 REQUIREMENTS FOR EDIBLE COCONUT FLOUR  
(EXPPELLER PRESSED)**

( Clause 2 6 )

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST ( REF TO APPENDIX OF IS : 4684 - 1975* )
( 1 )	( 2 )	( 3 )	( 4 )
i)	Moisture, percent by mass, <i>Max</i>	9 0	B
ii)	Protein ( $N \times 6.25$ ) ( on dry basis ), percent by mass, <i>Min</i>	20 0	C
iii)	Total ash ( on dry basis ), percent by mass, <i>Max</i>	5 0	D
iv)	Acid-insoluble ash ( on dry basis ), percent by mass, <i>Max</i>	0 35	E
v)	Fat ( on dry basis ), percent by mass, <i>Max</i>	9 0	F
vi)	Acid value of extracted fat, <i>Max</i>	4 0	G
vii)	Crude fibre ( on dry basis ), percent by mass, <i>Max</i>	9 0	H
viii)	Aflatoxin $\mu\text{g/kg}$ , <i>Max</i>	6 0	J

\*Specification for edible groundnut flour ( expeller-pressed ) ( first revision )

**TABLE 2 MICROBIOLOGICAL LIMITS FOR EDIBLE COCONUT  
FLOUR ( EXPPELLER PRESSED )**

( Clause 2 7 )

SL No	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST, REF TO
( 1 )	( 2 )	( 3 )	( 4 )
i)	Total bacterial count per g, <i>Max</i>	50 000	IS : 5402 - 1969*
ii)	Coliform bacterial count per g, <i>Max</i>	10	IS : 5401 - 1969†
iii)	Salmonella bacteria	Nil	IS : 5887 - 1970‡

\*Method for plate standard count of bacteria in foodstuffs

†Methods for detection and estimation of coliform bacteria in foodstuffs

‡Methods for detection of bacteria responsible for food poisoning and food-borne diseases

**3.2 Marking** — The container shall be legibly and indelibly marked with the following information:

- Name of the material;
- Name and address of the manufacturer;

**IS : 8664 - 1977**

- c) Batch or code number;
- d) Net mass; and
- e) Any other details required under Packaged Commodities Regulation, 1975.

**3.2.1** Each container may also be marked with the ISI Certification Mark.

**NOTE** — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution ( Certification Marks ), Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

#### **4. SAMPLING**

**4.1** Representative samples of the material shall be drawn and tested for conformity to this standard as prescribed in IS : 5315 - 1969\*.

#### **5. TESTS**

**5.1** Tests shall be carried out as prescribed in 2.2, 2.4 and Tables 1 and 2.

**5.2 Quality of Reagents** — Unless otherwise specified, pure chemicals and distilled water ( see IS : 1070 - 1977† ) shall be employed in tests.

**NOTE** — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of test analysis.

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\*Methods of sampling for milled cereals and pulses products


†Specification for water for general laboratory use ( second revision )

*( Continued from page 2 )*

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# **INDIAN STANDARDS ON NUTRITION**

**IS :**

- 3137-1974 High protein mixes for use as good supplement (*first revision*)
- 4684-1975 Edible groundnut flour ( expeller pressed ) (*first revision*)
- 4874-1968 Cottonseed flour ( expeller pressed ) (*first revision*)
- 4875-1975 Edible groundnut flour ( solvent extracted ) (*first revision*)
- 4876-1968 Cottonseed flour ( solvent extracted ) (*first revision*)
- 6108-1971 Edible sesame flour ( solvent extracted )
- 6109-1971 Edible sesame flour ( expeller pressed )
- 7021-1973 Protein rich foods supplements for infants and preschool children
- 7481-1974 Method for determination of protein efficiency ratio (PER)
- 7482-1974 Protein-based beverages
- 7487-1974 Protein rich biscuits
- 7835-1975 Edible low-fat soya flour
- 7836-1975 Edible medium-fat soya flour
-  7837-1975 Edible full-fat soya flour
- 8211-1976 Edible soya protein isolate
- 8212-1976 Edible groundnut protein isolate
- 8220-1976 Protein rich concentrated nutrient supplementary foods
- 8222-1976 Edible leaf protein concentrate
- 8664-1977 Edible coconut flour ( expeller pressed )
- 8665-1977 Protein-fortified bread
- 8676-1977 Edible coconut flour ( solvent extracted )
- 8677-1977 Edible sunflower seed flour ( solvent extracted )
- 8678-1977 Vegetable protein-based yoghurt ( vegetable curds )

## INTERNATIONAL SYSTEM OF UNITS ( SI UNITS )

### Base Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

### Supplementary Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>
Plane angle	radian	rad
Solid angle	steradian	sr

### Derived Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>	<i>Conversion</i>
Force	newton	N	1 N = 0.101 972 kgf
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m <sup>2</sup>
Frequency	hertz	Hz	1 Hz = 1 c/s (s <sup>-1</sup> )
Electric conductance	siemens	S	1 S = 1 A/V
Pressure, stress	pascal	Pa	1 Pa = 1 N/m <sup>2</sup>

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